

## SERVICE BULLETIN AMATEUR RADIO

SUBJECT	DATE
TH-77A MEMORY LOSS WITH LOW BATTERY PACK	02/06/91

Some of the TH-77A handhelds in serial number range S/N 206XXXXX intermittently lose memory when the NiCad battery pack becomes discharged. The following modification will correct this condition. TH-77A transceivers in serial number range S/N 207XXXXX and above will incorporate a change in the microprocessor to prevent this condition.

This modification requires the ability to desolder a surface mounted micro-miniature chip resistor from a flex PC board. **If you do not remove micro-miniature chip resistors from flex PC boards on a regular basis, DO NOT attempt this modification.**

Be sure to remove the battery terminal plate in step 2. **If the battery terminal plate is left on the transceiver (only the top 2 screws removed) the flex cable for the CTCSS unit can be damaged.**

### REQUIRED PART:

33K OHM CHIP RESISTOR

RK73GB1J333J

### MODIFICATION PROCEDURE:

1. Disconnect the battery and antenna.
2. Remove the 4 screws from the battery terminal plate and then remove the plate. FIGURE 1
3. Remove three case screws from the transceiver. FIGURE 1
4. Carefully open the transceiver. **Be careful not to break the flex cable that connects the front panel Control board to the body of the transceiver.**
5. Locate chip resistor R301 on the Control board inside the front panel of the transceiver. FIGURE 2
6. Check for a solder bridge between the foil trace connected to the bottom of R301 and the foil trace below it. If present, carefully desolder the solder bridge.

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This modification may be covered under warranty.

Time required to perform the modification is 1hr or less. (C) 020691EWP

7. Remove chip resistor R301.

**RECOMMENDED METHOD:** Use a hot air jet system to melt the solder on both sides of the resistor. When the solder is molten, remove the chip resistor with a pair of tweezers.

**OPTIONAL METHOD:** Use a wedge shaped soldering iron tip to melt the solder on both sides of the resistor at one time. As the solder melts, the chip resistor will lift from the board and stick to the soldering tip. Do not attempt to pry the chip resistor from the board. FIGURE 3

8. Install a 33K ohm chip resistor in place of R301. Do not re-connect the solder bridge removed in step 6.

9. Assemble the transceiver. Make sure the CTCSS board is positioned correctly so the flex cable is not stressed. Do not force the radio together.

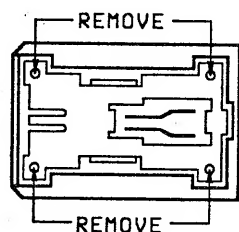
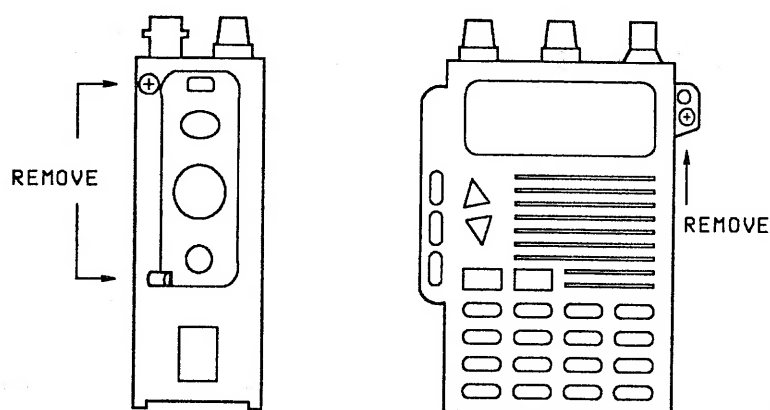


FIGURE 1

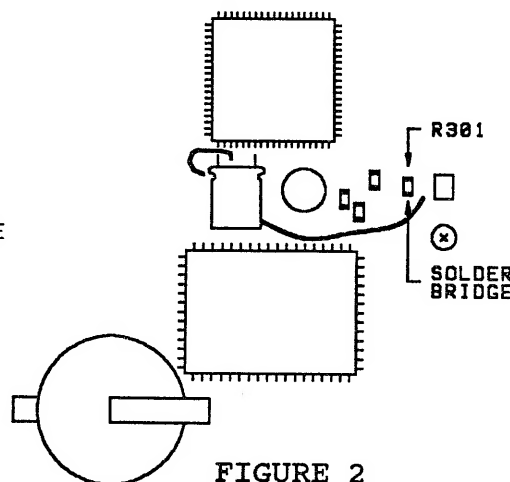


FIGURE 2

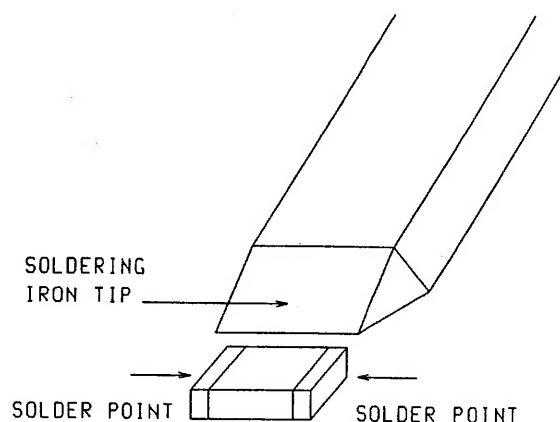


FIGURE 3